

SEP 19 2012

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**Section 5****510(k) Summary**

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**General Provisions**

Submitter Name: Merit Medical Systems, Inc.  
Address: 1600 West Merit Parkway,  
South Jordan, UT 84095  
Telephone Number: (801) 208-4349  
Fax Number: (801) 253-6967  
Contact Person: Stephanie Erskine  
Registration Number: 1721504

Correspondent Name: Merit Medical Ireland Ltd.  
Address: Parkmore Business Park,  
Galway, Ireland  
Telephone Number: (353) 91 703 761  
Fax Number: (353) 91 771 888  
Contact Person: Mark Mullaney  
Date of Preparation: March 1, 2012  
Registration Number: 9616662

**Subject Device**

Trade Name: Merit Hydrophilic Guide Wire  
Common/Usual Name: Hydrophilic Guide Wire  
Classification Name: Catheter Guide Wire

**Predicate Devices**

Trade Name: Merit Hydrophilic Guide Wire  
Classification Name: Catheter Guide Wire  
Premarket Notification: K092303  
Manufacturer: Merit Medical Systems, Inc.

**Classification**

Class II  
21 CFR § 870.1330, 74 DQX  
Division of Cardiovascular Devices

**Intended Use**

The Merit Hydrophilic Guide Wire is intended to facilitate the placement of devices during diagnostic and interventional procedures.

**Device Description**

The Merit Hydrophilic Guide Wire consists of a jacketed core wire with a hydrophilic coating applied to the jacket. The wire will be offered with straight and angled tip configurations in various lengths.

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**Comparison to  
Predicate**

Technological characteristics of the subject Merit Hydrophilic Guide Wire are substantially equivalent to those of the predicate, the Merit Hydrophilic Guide Wire [K092303]. The differences between the devices relate to the hydrophilic coating process. The guide wire design remains unchanged.

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No performance standards have been established under Section 514 of the Food, Drug and Cosmetic Act for these devices. However, a battery of tests was performed according to protocols based on the requirements of industry standards and guidances and were shown to meet the acceptance criteria that were determined to demonstrate the safety and efficacy of the device.

Where appropriate, the tests were based on the requirements of the following documents:

- FDA Guidance *Coronary and Cerebrovascular Guide Wire Guidance* January 1995.
- ISO 11070:1998, *Sterile Single-Use Intravascular Catheter Introducers*.
- ISO 11135-1:2007, *Sterilization of health care products - Ethylene oxide - Part 1: Requirements for the development, validation, and routine control of a sterilization process for medical devices*.
- ASTM F756-08 *Standard Practice for Assessment of Hemolytic Properties of Materials*
- ASTM F1980-07 *Standard Guide for Accelerated Aging of Sterile Barrier Systems for Medical Devices*.
- ISO 10993-1:2009, *Biological Evaluation of Medical Devices Part 1: Evaluation and Testing within a risk management process*, and the FDA Modified ISO 10993 Test Profile FDA Memo G95-1.
- ISO 10993-5:2009 – *Biological Evaluation of Medical Devices – Part 5: Tests for In-Vitro Cytotoxicity*
- ISO 10993-7:2008 - *Biological Evaluation of Medical Devices – Part 7: Ethylene Oxide Sterilization Residuals*
- ISO 10993-18:2005 – *Biological Evaluation of Medical Devices – Part 18: Chemical Characterization of Materials*

#### **Safety & Performance Tests**

The Merit Hydrophilic Guide Wire was compared to the predicate device for various performance attributes that demonstrate the safety or efficacy of the device. Differences in materials between the modified device and the cleared device [K092303] raised no issues of safety and effectiveness. The hydrophilic coating process was modified. The coating solution is made with the identical raw materials, equipment, and processes used for the preparation of the predicate coating solution.

The following is a list of all significant testing that was successfully completed:

- Coating Adherence/Integrity
- Catheter Compatibility
- Surface
- Fracture Test
- Flex Test
- Size Designation
- Biocompatibility
- Chemical Characterization

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**Summary of  
Substantial  
Equivalence**

Based on the indications for use, design, safety, and performance testing, the subject Merit Hydrophilic Guide Wire meets the requirements that are considered essential for its intended use and is substantially equivalent to the predicate device, the Merit Hydrophilic Guide Wire manufactured by Merit Medical Systems, Inc. Differences between the two devices do not raise any significant issues of safety or effectiveness.

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

SEP 19 2012

Merit Medical Systems, Inc.  
Mr. Mark Mullaney  
Regulatory Affairs Manager  
Parkmore Business Park West,  
Galway, Ireland

Re: K120644  
Trade/Device Name: Merit Hydrophilic Guide Wire  
Regulation Number: 21 CFR 870.1330  
Regulation Name: Catheter Guide Wire  
Regulatory Class: Class II  
Product Code: DQX  
Dated: September 10, 2012  
Received: September 12, 2012

Dear Mr. Mullaney:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act; or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



*for* Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

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Section 4

Indications for Use Statement

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510(k) Number (if known): K120644

Device Name: Merit Hydrophilic Guide Wire

Indications for Use:

The Merit Hydrophilic Guide Wire is intended to facilitate the placement of devices during diagnostic and interventional procedures.

Prescription Use X  
(Part 21 CFR 801 Subpart D)


AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE—CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Cardiovascular Devices

510(k) Number K120644